CLAIMS

1st) "PROCESS FOR MANUFACTURE OF SANITARY WARE ACRYLIC PLATES, OF SYNTHETIC GRANITE, USING CAST SYSTEM, WITH OR WITHOUT ABS REINFORCEMENT", characterized for presenting a first level logic, with a first stage called receiving raw material (A); a second stage called storage of raw material (B), a third stage called pre-polymerization (C), a fourth stage called polymerization (D), a fifth stage called second polymerization (E), a sixth stage called quality inspection (F) and a seventh stage called plate packing (G).

2nd) "PROCESS FOR MANUFACTURE OF SANITARY WARE ACRYLIC PLATES, OF SYNTHETIC GRANITE, USING CAST SYSTEM, WITH OR WITHOUT ABS REINFORCEMENT", in accordance to claim 1, characterized by the stage called pre-polymerization (C), being defined by a first step, called pumping raw material (C1), where the Methyl Metacrylate – MMA product is pumped inside a reactor type equipment, a step called raw material heating (C2), where the Methyl Metacrylate – MMA product is heated up to 85°C, a step called addition of other agents (C3).

3rd) "PROCESS FOR MANUFACTURE OF SANITARY WARE ACRYLIC PLATES, OF SYNTHETIC GRANITE, USING CAST SYSTEM, WITH OR WITHOUT ABS REINFORCEMENT", in accordance to claim 2, characterized by the definition of a first formulation where the raw material is Methyl Metacrylate (M.M.A.), a catalyst for the polymerization process, a catalyst for obtaining chemical resistance to solvents, a demoulding agent, a PVC cord, with Ford cup 4° viscosity = 100/110 sec.; initial water temperature = 50.0 +/- 1.0°C; final water temperature = 120.0 +/- 1.0°C.

4th) "PROCESS FOR MANUFACTURE OF SANITARY WARE ACRYLIC PLATES, OF SYNTHETIC GRANITE, USING CAST SYSTEM, WITH OR WITHOUT ABS REINFORCEMENT", in accordance to claim 1, characterized by

the stage called first polymerization (D), with a step called first preparation of the mould (D1); one step called mould filling (D2), where the mould is filled with the first formulation, a step called polymerization (D3) where the moulds are placed inside the autoclave, a step of mould cooling (D4); plate demoulding step (D5); plate grinding step (D6), where the plates are grinded; a step called particle selection (D7).

5th) "PROCESS FOR MANUFACTURE OF SANITARY WARE ACRYLIC PLATES, OF SYNTHETIC GRANITE, USING CAST SYSTEM, WITH OR WITHOUT ABS REINFORCEMENT", in accordance to claim 4, characterized by the definition of a second formulation where the raw material is Methyl Metacrylate (M.M.A.); a catalyst for the polymerization process; an auxiliary catalyst for obtaining chemical resistance to solvents; an additive allowing the so called Cross Linking; an additive that increases mouldability and elasticity; a demoulding agent, a PVC cord, an ABS plate; Ford cup 4° viscosity = 40/110 sec.; initial water temperature = 50.0 +/- 1.0°C; final water temperature = 120.0 +/- 1.0°C.

6th) "PROCESS FOR MANUFACTURE OF SANITARY WARE ACRYLIC PLATES, OF SYNTHETIC GRANITE, USING CAST SYSTEM, WITH OR WITHOUT ABS REINFORCEMENT", in accordance to claim 4, characterized by the polymerization step (D3) respecting a thermal curve, with initial temperature of 50°C, and after one hour this temperature increases to 120°C and is maintained constant until de end of the period with a total time of five hours, and after four hours begins the cooling step of the mould (D4) and of the polymerized plates inside it.

7th) "PROCESS FOR MANUFACTURE OF SANITARY WARE ACRYLIC PLATES, OF SYNTHETIC GRANITE, USING CAST SYSTEM, WITH OR WITHOUT ABS REINFORCEMENT", in accordance to claim 1, characterized by the stage called second polymerization (E) presenting a first step called second preparation of the moulds (E1), a step called mould filling (E2); where under low

temperature (pre-determined) and pressure the moulds are filled with the second formulation; step called degassing (E3), with the removal of all the air bubbles, a step called polymerization (E4), where the moulds return to the autoclave, with a new and final polymerization, a second cooling step (E5); a final plate demoulding step (E6).

8th) "PROCESS FOR MANUFACTURE OF SANITARY WARE ACRYLIC PLATES, OF SYNTHETIC GRANITE, USING CAST SYSTEM, WITH OR WITHOUT ABS REINFORCEMENT", in accordance to claim 7, characterized by a first form of conducting the step called second mould preparation (E1), called without ABS (E.1.1), not considering the use of ABS plates, with the sub-steps of mould washing (E.1.1.1), placing PVC cord (E.1.1.2) and closing the moulds (E.1.1.3).

9th) "PROCESS FOR MANUFACTURE OF SANITARY WARE ACRYLIC PLATES, OF SYNTHETIC GRANITE, USING CAST SYSTEM, WITH OR WITHOUT ABS REINFORCEMENT", in accordance to claim 7, characterized by second form of conducting the step called second mould preparation (E1), called with ABS (E.1.2), with the sub-steps of mould washing (E1.2.1), PVC cord placing (E.1.2.2), ABS plate placing (E.1.2.3) and mould closing (E.1.2.4).

10th) "PROCESS FOR MANUFACTURE OF SANITARY WARE ACRYLIC PLATES, OF SYNTHETIC GRANITE, USING CAST SYSTEM, WITH OR WITHOUT ABS REINFORCEMENT", in accordance to claim 7, characterized by the polymerization step (E4), whose thermal curve presents an initial temperature of 50°C, increased to 80°C and maintained for one hour, after this period the temperature is increased to a 120°C level and maintained until the end of the four hours period, after which begins the process of cooling the same.